

CLAIM AMENDMENTS

Please amend Claims 8 and 14 as follows:

1. - 7. (Cancelled)

8. (Currently amended) An image pickup apparatus comprising:

first and second photoelectric conversion units each including a plurality of photoelectric conversion elements;

a first microlens provided for said first photoelectric conversion unit, for focusing light onto the plurality of photoelectric conversion elements included in said first photoelectric conversion unit;

a second microlens provided for said second photoelectric conversion unit, for focusing light onto the plurality of photoelectric conversion elements included in said second photoelectric conversion unit;

a first holding unit adapted to hold signals from said first photoelectric conversion unit, said first holding unit including at least the same number of first capacitors as the number of the plurality of photoelectric conversion elements included in said first photoelectric conversion unit, wherein said first capacitors hold the signals from said plurality of elements included in said first photoelectric conversion unit, respectively;

a second holding unit adapted to hold signals from said second photoelectric conversion unit, said second holding unit including at least the same number of second capacitors as the number of the plurality of photoelectric conversion elements

included in said second photoelectric conversion unit, wherein said second capacitors hold the signals from said plurality of elements included in said second photoelectric conversion unit, respectively; and

a first common output line to which signals from the plurality of first and second capacitors included in said first and second holding units, respectively, are read out sequentially,

wherein the signals from said first photoelectric conversion unit are transferred to said first holding unit through a first switch and the signals from said second photoelectric conversion unit are transferred to said second holding unit through a second switch.

9. (Previously amended) An image pickup apparatus according to claim 8, further comprising:

third and fourth photoelectric conversion units each including a plurality of photoelectric conversion elements;

a third microlens provided for said third photoelectric conversion unit, for focusing light onto the plurality of photoelectric conversion elements included in said third photoelectric conversion unit;

a fourth microlens provided for said fourth photoelectric conversion unit, for focusing light onto the plurality of photoelectric conversion elements included in said fourth photoelectric conversion unit;

a second common output line to which signals from said first and third photoelectric conversion units are read out sequentially;

a third common output line to which signals from said second and

fourth photoelectric conversion units are read out sequentially;

wherein the plurality of capacitors included in said first holding unit hold the signals from said second common output line, and the plurality of capacitors included in said second holding unit hold the signals from said third common output line, and

wherein the signals from said third photoelectric conversion unit are transferred to said first holding unit through said first switch and the signals from said fourth photoelectric conversion unit are transferred to said second holding unit through said second switch.

10. (Previously amended) An image pickup apparatus according to claim 8, wherein each of said first and second photoelectric conversion units include an amplification unit adapted to amplify and output signals from the plurality of photoelectric conversion elements of said first and second photoelectric conversion units, said amplification unit being provided as a common amplification unit for the plurality of photoelectric conversion elements of said first and second photoelectric conversion units.

11. (Previously amended) An image pickup apparatus according to claim 8,

wherein each of said first and second holding units includes a capacity for holding at least the same number of noise signals as that of the plurality of photoelectric conversion elements; and

wherein said image pickup apparatus further comprises a differential

circuit adapted to subtract the noise signals from signals including photoelectric conversion signals generated by the photoelectric conversion elements.

12. (Previously amended) An image pickup apparatus according to claim 8, further comprising a control circuit adapted to perform focus adjustment based on a plurality of signals outputted sequentially from said first common output line.

13. (Previously amended) An image pickup apparatus according to claim 8, further comprising microlenses provided one for each of the plurality of photoelectric conversion elements.

14. (Currently amended) An image pickup apparatus comprising:
an image pickup area including a plurality of first photoelectric conversion elements and a second photoelectric conversion element;
a first microlens provided for the plurality of first photoelectric conversion elements included in said image pickup area;
a second microlens provided for the second photoelectric conversion element included in said image pickup area; and
a common output line to which ~~a signal~~ signals from the plurality of first photoelectric conversion elements and a signal from the second photoelectric conversion element are read out.

wherein said image pickup apparatus is arranged so that focusing is adjusted using the signals from the first photoelectric conversion elements but not the signal from the second photoelectric conversion element.

15. (Previously amended) An image pickup apparatus according to claim 14, further comprising a drive circuit having a mode for reading out, independently, the signals from the plurality of first photoelectric conversion elements and a mode for adding and reading out the signals from the plurality of first photoelectric conversion elements.